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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,542	07/17/2003	Werner Lautenschlager	27392/27614	2472

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EXAMINER

MAYEKAR, KISHOR

ART UNIT PAPER NUMBER

1753

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/621,542	<b>Applicant(s)</b> LAUTENSCHLAGER, WERNER	
	<b>Examiner</b> Kishor Mayekar	<b>Art Unit</b> 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1-44 is/are pending in the application.  
 4a) Of the above claim(s) 16 and 17 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-15 and 18-44 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/03 &amp; 3/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of invention of Group I, claims 1-15 and 18-44 in the reply filed on 27 April 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### *Specification*

2. The specification is objected because the headings introducing various paragraphs of the specification have been omitted.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.

- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The abstract of the disclosure is objected to because the inclusion "(Fig. 1)" as a second paragraph in the abstract. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: the inclusion of claims in pages 2-5 as the claims could be cancelled or renumbered during the examination.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4-6, 8-10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, the phrase "the flow-through container" lacks antecedent basis.

In claim 5, the phrases "the flow-through container" and "the conveyor" lack antecedent basis.

In claim 6, the phrases "the flow-through container" and "the spiral guide" lack antecedent basis.

In claim 8, the phrase "the flow-through container" lacks antecedent basis.

In claim 9, the phrase "the microwave space" lacks antecedent basis.

In claim 10, the phrase "the flow-through container" lacks antecedent basis.

In claim 12, the phrases "the flow-through container" lack antecedent basis.

***Claim Rejections - 35 USC § 102 and § 103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6, 10, 11, 15, 21, 25-28, 35-37 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by Warmbier et al. (US 5,408,074). Warmbier's invention is directed to an apparatus for the selective control of heating and irradiation of materials in a conveying path. Warmbier discloses that the apparatus comprises the recited microwave chamber surrounded a metal container 1 and the recited spiral device 2 (Figs. 1 and 2; col. 3, lines 6-18 and col. 4, lines 27-34). Warmbier also discloses the spiral device 2 is rotatably mounted in the container 1 and driven by a drive and the material is supplied to the container 1 by means of the spiral device 2 (col. 3, lines 6-18 and lines 41-46). As such, the container is extended at least partly in the microwave chamber and protrudes therefrom and, hence Warmbier discloses the recited container 1.

As to the subject matter of claim 2, Warmbier's device inherently possesses the recited mixing device because of the use of the spiral device starting in the container for transporting materials therefrom.

As to the subject matter of claim 3, Warmbier discloses that the spiral device is a screw conveyor that is the same as the worm conveyor.

10. Claims 3, 18, 19, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warmbier '074. The difference between Warmbier and the instant claims are each of the limitation recited in the instant claims.

As to the subject matter of claim 3 if there is a difference between Warmbier's screw conveyor and the recited worm conveyor, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Warmbier's teachings because the selection of any of known equivalent conveyors for transporting the material would have been within the level of ordinary skill in the art.

As to the subject matter of claims 18, 19, 29 and 30, the selection of the longitudinal would have been within the level of ordinary skill in the art.

11. Claims 8, 9, 20 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warmbier '074 in view of MacKenzie (US 4,608,261). The difference between Warmbier as applied above and the instant claims is the detailing of the recited connection of the container. MacKenzie shows the detailing in a heat-treating apparatus using microwave (Fig. 1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the



time the invention was made to have modified Warmbier's teachings as shown by ManKenziee because this would result in attaching the container to the apparatus housing.

12. Claims 7 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warmbier '074 in view of Miyazaki et al. (US 4,565,670). The difference between Warmbier as applied above and the instant claims is the provision that the recited inclination of the apparatus. Miyazaki shows in a heat-treating apparatus using microwaves the limitation (Fig. 1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Warmbier's teachings as shown by Miyazaki because this would result in facilitating the removal of the treated material.

13. Claims 14 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warmbier '074 as applied to claims 1-6, 10, 11, 15, 21, 25-28, 35-37 and 44 above, and further in view of GB 2,110,803 A. The difference between Warmbier as applied above and the instant claims is the provision of the recited cooling or heating device. GB '803 shows in a heating-treating apparatus using microwave the

limitation (section 3 in Fig. 1) and that a feed hopper may be replaced by an extruder device (col. 2, lines 42-44). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Warmbier's teachings as shown by GB '808 because this would result in heating the material prior to subjecting to microwave. Further, the motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have, *In re Newell* 13 USPQ 2d 1248, *Fromson v. Advance Offset Plate* 225 USPQ 26; *In re Gyurik* 201 USPQ 552.

14. Claims 12, 13, 22-24 and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warmbier '074 in view of GB '803. The difference between Warmbier as applied above and the instant claims is the provision that the recited pressure-limiting valve. GB '803 as applied above further shows the heating section 3 includes a manifold 39 located on the top of the heating section to hold v egressed vapors and the withdrawn of vapors from the manifold 39 via outlet 41 (col. 2, lines 11-17). It appears that the outlet 41 is equivalent to the recited pressure-limiting device. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have

modified Warmbier's teachings as shown by GB '803 because this would result in exhausting excessive pressure and render the heating section safe from excessive internal pressure.

*Oath/Declaration*

15. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

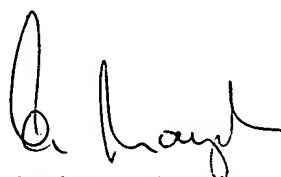
It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Kishor Mayekar', is positioned above the printed name.

Kishor Mayekar  
Primary Examiner  
Art Unit 1753